

**Draft Rule  
#01-180(WPCB)**

**Rule 13: Operational Rule**

SECTION 1. 327 IAC 8-13-1 IS ADDED TO READ AS FOLLOWS:

**327 IAC 8-13-1 Purpose of rule**

**Authority:** IC 13-13-5-1; IC 13-13-5-2; IC13-18-3-2; IC 13-18-11-13; IC 13-18-16-9

**Affected:** IC 13-14-1-13; IC 13-14-8; IC 13-18-11-2

**Sec. 1.** The purpose of this rule is to establish and maintain standards of operation and require corrections to drinking water source, water treatment plant and distribution system operations so as to protect human health and prevent adverse impacts to drinking water. *(Water Pollution Control Board; 327 IAC 8-13-1)*

SECTION 2. 327 IAC 8-13-2 IS ADDED TO READ AS FOLLOWS:

**327 IAC 8-13-2 Applicability of rule**

**Authority:** IC 13-13-5-1; IC 13-13-5-2; IC13-18-3-2; IC 13-18-11-13; IC 13-18-16-9

**Affected:** IC 13-14-1-13; IC 13-14-8; IC 13-18-11-2

**Sec. 2.** The standards and practices established in this rule are applicable to the operation and maintenance of all new or existing public water systems in Indiana. Each public water system shall comply with this rule. *(Water Pollution Control Board; 327 IAC 8-13-2)*

SECTION 3. 327 IAC 8-13-3 IS ADDED TO READ AS FOLLOWS:

**327 IAC 8-13-3 Definitions**

**Authority:** IC 13-13-5-1; IC 13-13-5-2; IC13-18-3-2; IC 13-18-11-13; IC 13-18-16-9

**Affected:** IC 13-14-1-13; IC 13-14-8; IC 13-18-11-2

**Sec. 3.** The following definitions apply throughout this rule:

(1) "Critical part" means a piece of equipment essential to the safe operation of a public water system, including expendable parts such as glassware, fittings, hose clamps, and gaskets.

(2) "Distribution system" means one (1) of the following:

(A) In a community public water system, the term means the network of water piping, pumping stations, storage equipment, valves, fire hydrants, pressure regulators, and equipment required to transport water to the customer's service connection from one (1) of the

following points:

(i) A treatment plant.

(ii) A source of raw water supply if no treatment is provided.

(B) In a noncommunity public water system, the term means the

the following:

(i) A point that is one (1) foot beyond the water storage tank.

(ii) The well if no water storage tank is utilized.

(3) "Generic Meters" means any mechanism used to measure flow of water from or across a distribution system which would include the following:

(A) Residential

(B) Industrial

(4) "Hydraulic information" means the slope of the following:

(A) Hydraulic grade line

(B) Water surface in an open channel

(C) Water surface of the groundwater table

(D) Water pressure for pipe under pressure (shows different pressures

(5) "Interconnections" means a public water system supplies water to or

(6) "Maintenance Logs" means a method of recording the following:

(A) Maintenance of the distribution system, including appropriate pipe replacement and repair procedures

(B) Main flushing programs

(C) Maintenance of storage tanks and reservoirs

(D) Continual maintenance of positive water pressure in all parts of the distribution system.

(7) "Major system components" means any equipment that if failed would leave consumers without water or adequate water pressure.

(8) "Process flow" means how the water flows from the source through the treatment process.

(9) "Source" means the origin of the water that is treated or distributed whether it is ground water, surface water, or purchased water.

(10) "Storage" means any device used to hold water which would include any size of containers, but does not include distribution piping.

(11) "Supplier of Water" means owner, operator and governing body of public water systems.

(12) "Treatment" means any method used to modify the water's characteristics.

SECTION 4. 327 IAC 8-13-4 IS ADDED TO READ AS FOLLOWS:

**327 IAC 8-13-4 Operation**

Authority: IC 13-13-5-1; IC 13-13-5-2; IC13-18-3-2; IC 13-18-11-13; IC 13-18-16-9

Affected: IC 13-14-1-13; IC 13-14-8; IC 13-18-11-2

**Refer to 327 IAC 8-12-3.2**

(Water Pollution Control Board; 327 IAC 8-13-4)

SECTION 5. 327 IAC 8-13-5 IS ADDED TO READ AS FOLLOWS:

**327 IAC 8-13-5 General Maintenance**

**Authority:** IC 13-13-5-1; IC 13-13-5-2; IC13-18-3-2; IC 13-18-11-13; IC 13-18-16-9

**Affected:** IC 13-14-1-13; IC 13-14-8; IC 13-18-11-2

**Sec. 5. (a) A supplier of water shall ensure that the public water system is operated to provide and maintain safe drinking water to consumers. This responsibility includes the following:**

- (1) Maintaining or contracting trained staff to perform all necessary duties.**
- (2) Performing maintenance and replacement of equipment when necessary.**
- (3) Providing testing to control and monitor treatment processes and chemical addition programs.**

**(b) An owner of a public water system is responsible for ensuring that:**

- (1) The system complies with this rule**
- (2) The system's operator has all of the resources necessary for proper operation of the system**

**(c) A Supplier shall meet the flow rate and pressure requirements set forth in 327 IAC 8-3.4-12.**

**(d) A public water system shall ensure that chemicals added to drinking water and passed to the distribution system shall be approved by any of the following:**

- (1) United States Environmental Protection Agency (U.S. EPA) (pursuant to provisions of the Safe Drinking Water Act (42 U.S.C. 300f et seq. (1980)), the Toxic Substance Control Act (15 U.S.C. 2604 et seq. (1982)), or the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq. (1980)))**
- (2) United States Food and Drug Administration (USFDA) (pursuant to the Federal Food, Drug and Cosmetic Act (21 U.S.C. 301 et seq. (1983)))**

**Chemicals added must meet the purity requirements of Water Chemicals Codex, National Research Council of the National Science Foundation. All chemical containers shall bear the name, address and telephone number of the supplier, along with a functional name or identification and strength of the chemical. Chemicals shall not be fed in excess of the maximum dosage approved by U.S. EPA or USFDA.**

**(e) A public water system shall comply with 327 IAC 8-3 when construction permits are required.**

**(f) A public water system shall have an operation and maintenance program in accordance with the Safe Drinking Water Regulations which must also include an operation and maintenance manual except that public water systems classified as class DSS(distribution system small) or other systems approved by the commissioner**

may use a checklist instead of an operational manual.

(g) A public water system shall have a system or method to obtain critical spare parts available to address reasonably foreseeable needs in a timely fashion in order to prevent adverse impacts to drinking water.

(Water Pollution Control Board; 327 IAC 8-13-5)

SECTION 6. 327 IAC 8-13-6 IS ADDED TO READ AS FOLLOWS:

**327 IAC 8-13-6 Operation and Maintenance Program**

Authority: IC 13-13-5-1; IC 13-13-5-2; IC13-18-3-2; IC 13-18-11-13; IC 13-18-16-9

Affected: IC 13-14-1-13; IC 13-14-8; IC 13-18-11-2

**Sec. 6. (a) An Operation and Maintenance Program required under section 5(e) of this rule must contain a description of known system components including the following:**

- (1) source**
- (2) treatment**
- (3) storage**
- (4) distribution**
- (5) interconnections**
- (6) meters that are used for system flow or process control**
- (7) pumps**

**The description must include the drawings of the components and their location as applicable.**

**(b) An Operation and Maintenance Program required under section 5(e) of this rule must contain an approach for maintaining the operation process which must contain at a minimum the following:**

- (1) A schematic drawing of the process flow**
- (2) Schematic drawings for the following if available:**
  - (A) Hydraulic information**
  - (B) SCADA information**
- (3) Process operation description which includes all of the system components.**
- (4) Manufacturers Operation Manuals if available**
- (5) An overview of security measures which may include fencing, securing of components, employee training, and access controls.**

**(c) An Operation and Maintenance Program required under section 5(e) of this rule must contain a maintenance schedule of how often major system components are maintained and what major system components are maintained including the following:**

- (1) Target Frequency**
- (2) Maintenance logs**
- (3) The portion of the manufacturer's O & M manual dealing with maintenance frequency if available**

**(4) Description of maintenance procedures**

**(d) An Operation and Maintenance Program required under section 5(e) of this rule must contain a contact list with names and phone numbers including the following if applicable:**

- (1) Vendors and suppliers**
- (2) Responsible staff**
- (3) Contractors utilized by a public water system**
- (4) Utilities**
- (5) Regulatory Agencies**
- (6) Management**
- (7) Consultants used by a public water system**
- (8) Critical Users**
- (9) Emergency contacts**
- (10) Other contacts utilized for O & M functions**

**(e) An Operation and Maintenance Program required under section 5(e) of this rule must contain and have an approach for maintaining safety procedures including the following:**

- (1) Procedures for emergency response due to manmade emergencies**
- (2) Procedures for emergency response due to natural causes**

**(f) An Operation and Maintenance Program required under section 5(e) of this rule must contain and have an approach for maintaining a supply inventory which must include the following if applicable:**

- (1) treatment chemicals**
- (2) critical spare part/equipment/lubricants**
- (3) testing/lab supplies**
- (4) general supplies**

**(g) An Operation and Maintenance Program required under section 5(e) of this rule must list information regarding compliance monitoring and reporting including the following:**

- (1) who a public water system reports to**
- (2) what is reported**
- (3) frequency of reporting**
- (4) where reports are sent**
- (5) method of information reporting**

**(h) An Operation and Maintenance Program required under section 5(e) of this rule must contain a method for keeping records and keeping those records current for all of the above mentioned information.**

**(i) A public water system must have an Operation and Maintenance Program required under section 5(e) of this rule in place one year from the effective date of this rule.**

**(j) All new construction completed after the effective date of the rule must be accurately represented.**

**(k) The commissioner may require additional information if necessary on a case-by-case basis.**

(Water Pollution Control Board; 327 IAC 8-13-6)

SECTION 7. 327 IAC 8-13-7 IS ADDED TO READ AS FOLLOWS:

**327 IAC 8-13-7 Distribution System**

**Authority:** IC 13-13-5-1; IC 13-13-5-2; IC13-18-3-2; IC 13-18-11-13; IC 13-18-16-9

**Affected:** IC 13-14-1-13; IC 13-14-8; IC 13-18-11-2

**Sec. 7. (a) Distribution system pressure requirements are as follows:**

(1) Distribution systems shall be designed to maintain pressures. The system shall be designed and operated to maintain a minimum residual pressure of 20 psi at ground level at all points in the distribution system under all conditions of flow.

(2) Water mains shall be sized to deliver the required quantity of water at adequate pressure for drinking water use.

(3) The system shall be designed to meet existing demands on the distribution system. A public water system may not add additional customers unless they can show they can meet section 7(a)(1) and 7(a)(2).

**(b) A sample site plan and map including addresses must meet the following:**

(1) A Public water system must collect total coliform samples at sites which are representative of water throughout the distribution system according to a written sample siting plan and map including addresses approved by the commissioner. A site plan and map including addresses is to be on file in the Drinking Water Branch, Office of Water Quality, and the system files.

(2) The general location of routine sample sites must be indicated on the site plan and map and the specific locations are to be identified using a three (3) digit identification number (001). Using the three (3) digit identification number, a corresponding list is to be completed which includes the address and phone number of each site. The number of sites is based on the population served by the water supply. Systems should choose sites with dedicated sampling taps or businesses with ready access. Dead end lines and outside spigots should be avoided. The plan, as submitted to the Drinking Water Branch, is reviewed for completeness by the field inspector.

(3) The sample site plan and map required under subdivision (d)(1) must be reviewed annually and updated as appropriately.

**(c) A public water system must meet the following:**

(1) Dead ends shall be minimized by looping mains whenever possible. Where dead end mains occur, they shall terminate with an adequate flushing device. Refer to 327 IAC 8-3.2-13 for further dead end requirements.

(2) Flushing devices must meet the following:

(A) Existing public water systems shall provide flushing devices to ensure that quantity and quality of water are not adversely impacted.

(B) Public water systems designed and constructed after the effective date of this rule must comply with flushing device requirements of 327 IAC 8-3.2-15.

(C) Flushing devices which are found upon routine maintenance may not be connected to, or located within 8 feet of sanitary sewers or storm sewer inlets. Such connections must be disconnected as they are found during routine maintenance.

(3) Valves must meet the following:

(A) Existing public water systems shall locate valves to minimize customer service disruptions.

(B) Public water systems designed and constructed after the effective date of this rule must comply with valve requirements of 327 IAC 8-3.2-14.

(C) Valves should be exercised at a frequency to maintain proper operation.

**(4) Booster Stations must meet the following:**

**(A) Where the storage or primary pumping facilities cannot provide a minimum pressure of 20 psi throughout the distribution system at ground level, it shall be necessary to create a boosted pressure zone to serve those portions of the system.**

**(B) Automatic control equipment shall be installed to prevent the pump from causing a vacuum and/or lowering water pressure in any part of the distribution to less than 20 psi as measured at a ground surface.**

**(5) Water Loading Stations must meet the following:**

**(A) There may be no back flow to the public water supply**

**(B) The piping arrangement shall prevent contaminants being transferred from a hauling vessel to others subsequently using the station.**

**(C) Hoses may not be contaminated by contact with the ground.**

**(d) A supplier of water shall perform routine maintenance to ensure leaks are discovered as soon as possible and repaired.**

**(e) Backflow preventors should be provided and maintained according to 327 IAC 8-10.**